

DOCUMENT RESUME

ED 425 786

JC 990 037

AUTHOR Brewer, Jerrilyn A.
 TITLE Integration of Academic and Occupational Education in Community/Technical Colleges. ERIC Digest.
 INSTITUTION ERIC Clearinghouse for Community Colleges, Los Angeles, CA.
 SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
 REPORT NO EDO-JC-99-01
 PUB DATE 1999-01-00
 NOTE 4p.
 CONTRACT ED-99-CO-0010
 PUB TYPE ERIC Publications (071) -- ERIC Digests in Full Text (073)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Community Colleges; *Education Work Relationship; Educational Change; Educational Innovation; General Education; *Integrated Curriculum; *Interdisciplinary Approach; Job Training; Program Implementation; *Technical Institutes; Two Year Colleges; *Vocational Education
 IDENTIFIERS ERIC Digests

ABSTRACT

This digest discusses the rationale for integrating academic and occupational education. It describes models for, and barriers to, integration, and offers suggestions for advancing integration efforts. Integration of academic and occupational education reinforces the shifting paradigm from teaching to learning and requires that students become active participants in the construction of their own knowledge. It also expands occupational education to include civic goals, helps meet the civic needs of the community, and prepares students to work in technologically oriented workplaces. The digest briefly discusses the experiences of five community colleges and technical schools that have implemented some or all of the following approaches to integration: (1) general education requirements; (2) applied academics courses; (3) cross-curricular incorporation of academic skills in occupational programs; (4) incorporating academic modules in expanded occupational courses; (5) multidisciplinary courses combining academic perspectives and occupational concerns; (6) tandem and cluster courses and learning communities; (7) colleges-within-colleges; and (8) remediation and English-as-a-second language programs with an occupational focus. Listed are possible barriers to integration and ways in which administrators can facilitate the integration process. (Contains 13 references.) (SL)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ERIC Digest

Integration of Academic and Occupational Education in Community/Technical Colleges

Jerrilyn A. Brewer

ERIC Clearinghouse for Community Colleges

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.

☐ Minor changes have been made to
improve reproduction quality.

• Points of view or opinions stated in this
document do not necessarily represent
official OERI position or policy.

January, 1999

EDO-JC-99-01

Integration of Academic and Occupational Education in Community/Technical Colleges by Jerrilyn A. Brewer

Introduction

Community and technical colleges are facing increased external pressure to design curriculum and instruction in ways that show students how to apply concepts learned in both their occupational and academic courses. Teahen (1996) contends that "vocational educators are criticized for providing overly specific training, and academic educators are criticized for providing instruction that is neither participatory nor connected to the real-world's requirements" (p. 3). One solution to this dilemma is the integration of academic and occupational education. This Digest cites a rationale for integrating academic and occupational education, describes models for integration, outlines barriers to integration, and suggests ways in which community and technical college leaders can advance integration efforts.

Rationale for Integration

Integration of academic and occupational education reinforces the shifting paradigm from teaching to learning and requires that students become active participants in the construction of their own knowledge. Badway and Grubb (1997) suggest that integrating academic and occupational education broadens occupational education and strengthens its connection to civic goals. Academic and occupational integration has the potential to offer a broader focus for occupational education and to offer opportunities for a more diverse group of students (Illinois Task Force, 1997, p. 4). Copa and Ammentorp (1997) suggest that design of the learning process - i.e., curriculum, instruction, and assessment - must become more integrated and better suited to the specifications for learning outcomes. They suggest that the learning process "engage the learner in inquiry

(research) and knowledge construction and that learning projects [are] connected to the needs of the community" (p. 10).

The Commission on the Future of the Community College (1988) recommends that community/technical colleges "integrate general education within the specialized studies program—through interdisciplinary courses, special seminars, and the like" and that the community college "should overcome departmental narrowness by integrating technical and career studies with the liberal arts" (p. 18).

Edmonds (1993) states that there appears to be general consensus that students in occupational programs need more than concrete skills to perform well in the work force. She challenges faculty and administrators to "integrate occupational programs and general education so that students see the connectedness of their learning, practice problem solving, work cooperatively with others, and construct and evaluate alternatives" (p. 85).

Integration can also help to move vocational education from traditional narrow skills-training to education that prepares students to work in increasingly high-skilled, technical work places. Jacobs (1993), calling for American higher education to serve the changing interests and needs of U.S. businesses, cites a "compelling need to move vocational education away from the overemphasis on hands-on skills in order to develop programs that meet the needs of employers" (p. 81).

Models for Community/Technical College Integration

A variety of curriculum integration models can be used in community/technical colleges. Grubb and Kraskouskas (1992) identify and describe eight approaches to integration: general education requirements, applied academics

courses, cross-curricular incorporation of academic skills in occupational programs, incorporating academic modules in expanded occupational courses, multidisciplinary courses combining academic perspectives and occupational concerns, tandem and cluster courses and learning communities, colleges-within-colleges, and remediation and English-as-a-second language programs with an occupational focus.

A variety of integration efforts have been implemented recently. Nicolet Technical College identifies and assesses college-wide "institutional outcomes" or "core abilities" in all college programs and courses (Bass, 1996, p. 4). Every student in a program of substantial length is taught and assessed for these outcomes before leaving the institution.

Delta College developed the Delta Bio-Ethics-Nursing 100 project as a learning community where students participated in three courses—Introduction to Health Care, Health Care Ethics, and College Composition I. Core abilities and general education competencies were integrated and infused across all three courses, common themes for linking and learning activities were shared in all three courses, and faculty team-taught the courses (Jacobs & Teahen, 1996).

Albuquerque Technical-Vocational Institute brought together eighty faculty from five departments to form integration teams. The goal of the project was to enhance communication among departmental faculties, employers, and advisory boards; to enhance both the general education and career education courses; to produce materials that connected theory to practice; and to improve vocational students' attitudes about required courses by presenting career applications of educational content (McBroom, 1996).

Seminole Community College created a course called "Technology and the Humanities for the 21st Century" which it requires or strongly recommends for associate degree programs. The course examines how technology interacts with culture in the modern world as well as technology's connection to the past (Prager, 1994).

Kirkwood Community College secured a National Endowment for the Humanities grant for interdivisional faculty from career programs and liberal arts to create three interdisciplinary humanities courses on topics of special interest to career students: Working in America, Technology and the Human Condition, and Living in the Information Age (Prager, 1994).

Barriers to Integration

Barriers to integration are many and varied and pose challenges to colleges wishing to move ahead with integration initiatives. Examples of barriers include (Teahen, 1996, p. 16): universities' lack of acceptance of transfer credit for "new" courses, reluctance of faculty to change, pervasive disciplinary specialization, lack of leadership in support of curriculum reform, lack of support from administrators, lack of knowledge of how to integrate, perceptions of status differences between academic and occupational faculty, and lack of resources for release time, planning, and professional development.

Each of these barriers presents special challenges and requires college-wide commitment to engage in substantive efforts to integrate academic and occupational education.

Role of Administration

The literature documents administrators' key role in effecting the integration of academic and occupational education. According to Schmidt, Finch, & Faulkner (1992), "Administrative practices and procedures were viewed as contributing to cooperative efforts, curriculum strategies, and instructional strategies by fostering a positive climate for integration. Numerous instances of administrative activities could be linked to integration" (p. 57). Schmidt et al identified eight subthemes which emerged as effective administrative practices fostering integration efforts: facilitating the integration process, handling administrative constraints, handling teacher concerns, learning

from experience, scheduling/organizing classes, dealing with teacher resentment, involving teachers, and seeking administrative support.

The Illinois Task Force on Academic/Occupational Integration (1997) concludes, "Advancing academic and occupational education within the community college requires the commitment of leadership to nurturing an environment that supports innovation and to providing resources that support planning, development, and implementation" (p. 17).

Conclusion

The integration of technical and academic curriculum will allow students to become more active participants in their learning. Furthermore, graduates will gain concrete skills, such as literacy, needed in today's work environments. Numerous models exist for the successful integration of occupational and academic curriculum despite the internal and external barriers which exist. The support and leadership of administrators is a critical factor in successful integration efforts.

References

- Badway, N. & Grubb, W. N. (1997). Curriculum integration and the multiple domains of career preparation: A sourcebook for reshaping the community college. Berkeley, CA: National Center for Research in Vocational Education, University of California at Berkeley.
- Bass, H. G. (1996). "Curriculum advancement for work force colleges: The Nicolet College process." (ED 405919).
- Commission on the Future of the Community College. (1988). Building communities: A vision for a new century. Washington, D.C. American Association of Community and Junior Colleges.
- Copa, G. H. & Ammentorp, W. (1997). A new vision for the two-year institution of higher education: Preparing for a changing world. Berkeley, CA: National Center for Research in Vocational Education, University of California at Berkeley.
- Edmonds, C. F. (1993). General education in occupational programs: The barriers can be surmounted. *New Directions for Community Colleges*, 81, Spring, pp. 85-91. (EJ 464450).
- Grubb, W. N., & Kraskouskas, E. (1992). "A time to every purpose: Integrating occupational and academic instruction in community colleges and technical institutes." Berkeley: National Center for Research in Vocational Education, University of California at Berkeley. (ED 350405)
- Illinois Task Force on Academic/Occupational Integration. (1997). Blurring the lines: Integrating academic and occupational instruction at the community college. Springfield: Illinois Community College Board.
- Jacobs, J., & Teahen, R. C. (1996). "We're doing it: Michigan models for academic and occupational integration." (ED 399997).
- Jacobs, J. (1993). "Vocational education and general education: New relationship or shotgun marriage?" *New Directions for Community Colleges*, 81, Spring, pp. 75-84 (EJ 464449).
- McBroom, G. (1996). Liberal arts vs. vocational education: An Olympian balancing act. (ED 394580).
- Prager, C. (1994). Harmonizing general education programs in career and professional curricula. (ED 367401).
- Schmidt, B. J., Finch, C. R., Faulkner, S. L. (1992). Helping teachers to understand their roles in integrating vocational and academic education. Berkeley: National Center for Research in Vocational Education, University of California at Berkeley.
- Teahen, R.C. (1996). "Curriculum models: Integration of academic and occupational content." (ED 399998).

The ERIC Clearinghouse is administered by the National Library of Education (NLE) and operates under OERI Contract No. ED99CO0010. The opinions expressed in this digest do not necessarily reflect the position or policy of NLE/OERI and no official endorsement by NLE/OERI should be inferred.